REMARKS/ARGUMENTS

The subject matter of Claim 12 is inserted into Claim 9 and also Claim 21. Claim 9 is now Claim 12 amended to be independent. Claim 21 includes the same limitation. This avoids rejections not applied to Claim 12.

The primary reference of the claims is based on Van Rijn for teaching a method using a stamp for printing (which the Examiner states is the "plate"). Kiguchi is cited to show changes in hydrophilic nature using UV light. Hiroki is added to the primary combination to reject Claim 12 features.

The present invention objects include especially avoiding difficulties with prior art techniques (especially ink-jet printing) while reducing waste and without high costs. Of course, maintaining high quality results must also be an object.

As described in paragraphs [0002] and [0003] of Kiguchi et al (US 2003/24103), when a photolithographic method is used for forming a metal film, such as circuit patterns or wiring patterns, a large-scale equipment or complicated steps are required. Thus, the invention of Kiguchi et al aims to solve the problem of high cost. In

order to solve this problem, as the first embodiment, as the method for forming an antenna for a radio frequency identification (RFID) tag, paragraph [0043] describes that a spiral antenna 13 is formed on a substrate 11 by an inkjet. More specifically, the reference describes that by applying an organosiloxane onto a polyimide substrate, and by exposing it to UV light via an optical mask, the exposed portion of the hydrophobic organosiloxane is made to be hydrophilic (see paragraph [0046]). Further, the reference discloses that a gold colloidal solution is dropped to a position of the wiring by an inkjet method (see paragraph [0047]).

Further, as the second embodiment, Kiguchi et al describes that a microlens array is manufactured by an inkjet method (see paragraph [0054]). Further, the reference discloses the following matters: by using the method described as the third embodiment, liquid containing fine metal particle is dropped on a vibrating plate 31 to form a coil 32, so as to manufacture a speaker (paragraph [0059]); as the fourth embodiment, it is described that electric wiring is formed on a wall (paragraph [0061]); as the fifth embodiment, it is described that by feeding a metal-containing liquid 54 into a hole 53 provided on an

insulating substrate 51, three-dimensional structure wiring can be manufactured wherein electrical circuits 52 arranged on each side of the insulating substrate 51 are connected to each other (see paragraphs [0064] to [00661); and as the sixth embodiment, it is described that by discharging a liquid containing fine metal particles into slits 62 by the inkjet method, an anisotropic conductive film 61 is manufactured (see paragraph [0068]).

That is, in Kiguchi et al, when patterning a metal, mainly a metal such as wiring, an organosiloxane is applied onto a substrate, which is exposed to UV light via an optical mask, thereby making the exposed portion of the hydrophobic organosiloxane hydrophilic. The reference indicates that a material is dropped to a hydrophilic portion by the inkjet method. However, the reference fails to disclose that a charge transporting layer material or a light-emitting layer material of an organic EL element is applied, or that a droplet formed on a portion made to be hydrophilic is transferred to a substrate. That is, Kiguchi et al is intended to make the substrate on which a pattern is formed selectively hydrophilic, and wiring is directly formed on the hydrophilic substrate. The reference does not indicate that a plate, which is to be transferred to a substrate, is made to be

selectively hydrophilic, and that patterning is performed for at least one of the charge transport layer material and light-emitting layer material, as in the present invention. Furthermore, the reference does not disclose that the patterning is performed by transferring a material to a substrate using the hydrophilic plate. In addition, as shown in Kiguchi et al, if an organosiloxane is provided on a substrate to be transferred, it is feared that unreacted organosilxane will remain, and if such residue exists, it is possible that the characteristics of the charge transporting layer or light-emitting layer will be impaired.

It is understood that references are cited in combination not individually. However, it is not proper to select teaching out of context for combining them. As can be seen, since the patterning technology of the inkjet, etc., as shown in Kiguchi et al, is totally different from the printing technology shown in Van Rijn et al (WO2002143937), in terms of the category, structure and usage, it is not obvious to look to Kiguchi to select teaching for combination with Van Rijn.

Furthermore, even if Kiguchi et al and Van Rijn et al are combined, there is no teaching of the present invention requirement that light is irradiated onto a to-be-transferred plate to change the wettability of the wettability

changeable layer, and to coat the substrate with an optical material containing liquid, and that the droplet is transferred to the substrate by the coated plate.

The present invention has a particular advantage that no problem is caused by the treatment to change the wettability of a wettability changeable layer applied to a substrate, since the wettability changeable layer does not have to be provided on a substrate. Accordingly, neither Kiguch at al nor Van Rijn et al have the above-mentioned advantage obtainable by the present invention, even when combined as suggested by the Examiner.

Further, Hiroki et al (US 2001/23661) which is applied to claim 12 (corresponding to amended claim 9) describes in paragraph [0145] that an EL layer 350 contains a hole transporting layer, etc. However, the reference does not disclose the points that the hole transporting layer is coated onto a wettability changeable layer whose wettability is changed by the irradiation of light, and a material is transferred to a substrate using a plate having such a wettability changeable layer. Therefore, Hiroki fails to add the missing teaching discussed above, to the combination.

In view of the above, it is submitted that the present invention should not be rejected under 35 U.S.C. 103 (a) in

view of Van Rijn et al, and Kiguchi et al, and adding Hiroki does not change this conclusion.

Kimura et al (US 2002/75422) was combined with Van Rijn and Kiguchi, to reject Claims 11 and 19. In Claim 20 of Kimura, it is clear that the difference in lyophilic property of the predetermined positions and that of the surrounding portion is increased. As recited in claim 30, this is achieved by irradiating UV rays or plasma. More specifically, as described and shown in paragraphs [0199] to [0203] and FIG. 10, an inter level insulation film 240 onto which UV rays or plasma is irradiated will have liquid repellency. Thus, the invention of Kimura et al is different from the present invention in that the portion onto which light is irradiated has a liquid repellency characteristic, which is opposite to the lyophilic characteristics of the present invention.

Further the invention of Kimura et al is different from the present invention in that UV rays are irradiated onto a substrate, which will serve as a display, and not onto the plate to be transferred.

Accordingly, Kimura teaches away from the present invention and the invention recited in claim 11 of the present application should not be rejected under 35 U.S.C. 103

(a) in view of Van Rijn et al, Kiguchi et al, and Kimura et al.

Suda (US Patent No. 6851364), which is applied to claim 17, also does not add to the primary combination to disclose the feature of the present invention, i.e., a plate in which the wettability of a wettability changeable layer is changed by the irradiation of light is coated with an optical material containing liquid, and thus coated plate is used to transfer a droplet to a substrate.

In view of the above, the rejections are avoided. Allowance of the application is therefore respectfully requested.

Respectfully submitted,

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